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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/412,539 10/05/99 KUCERA

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000570 HM22/0420  
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EXAMINER

COLEMAN, R

ART UNIT

PAPER NUMBER

8

1624

DATE MAILED:

04/20/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
**09/412,539**

Applicant(s)

**KUCERA et al.**

Examiner  
**Brenda Coleman**

Group Art Unit  
**1624**



☒ Responsive to communication(s) filed on Mar 14, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 56-71, 95, 96, and 101 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 56, 65, 68, 95, and 101 is/are rejected.

☒ Claim(s) 57-64, 66, 67, 69-71, and 96 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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### **DETAILED ACTION**

Claims 56-71, 95, 96 and 101 are pending in the application.

1. It is noted that the applicants have filed a paper on March 14, 2000, titled "REQUEST FOR CORRECTED FILING DATE". This paper was not properly executed. Additionally, this paper should be titled such that it indicates that it is a petition since it is the Special Program Law Office and the Office of Petitions that makes the decision with regards to this matter. Applicants' attention is drawn to MPEP 1002.02(b) and 506.

### ***Election/Restriction***

2. Applicant's election with traverse of Group III in Paper No. 7 is acknowledged. The traversal is on the ground(s) that the chemical and biological properties of the compounds of Groups II and III are not patentably distinct and relate to a single, general inventive concept having a common chemical structure and the same chemical formula (formula III).

In view of the applicants' remarks and upon further consideration the claims of Group II will be examined along with the elected invention of Group III.

### ***Priority***

3. Any non-provisional application claiming the benefit of one or more prior filed copending nonprovisional applications or international applications designating the United States of America must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior application, identifying it by application number (consisting of the

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series code and serial number) or international application number and international filing date and indicating the relationship of the applications. Cross - references to other related applications may be made when appropriate.

“This application is a division of U.S. Application No. 08/793,470 filed May 2, 1997, now U.S. Patent No. 5,962,437 which is a 371 of PCT/US95/10111, filed August 7, 1995, which is a continuation of Application No. 08/314,901, filed September 29, 1994, abandoned, which is a continuation-in-part of Application No. 08/297,416, filed August 29, 1994, abandoned.” is suggested.

***Information Disclosure Statement***

4. The information disclosure statement filed October 5, 1999 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Several of the journal articles were not present in the parent applications, thus it is requested that the following references be provided to complete the record:

Kuman, et al., “Chemical Abstract”, 117CA 124476; (1992)

Miller et al., Proc. Natl. Acad. Sci. USA, 83, pp. 2531-2535, (1986)

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Pacheco, Abstract 2446, Proceedings of the American Assoc. for Cancer Res. 31, 416  
(March 1990)

Pidgeon et al., "Chemical Abstract", 120CA69591g, (1994)

Scolaro et al., "Chemical Abstract", 117CA124476p (1992)

Small, Abstract 2447, Proceedings of the American Assoc. for Cancer Res. 31, 416  
(March 1990) and

Sumamoto et al., "Chemical Abstract", 117CA68365n, (1992).

#### ***Oath/Declaration***

5. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

The specification to which the oath or declaration is directed has not been adequately identified. See MPEP § 601.01(a). Application Serial No. 08/793,470 was filed May 2, 1997 not August 7, 1995.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims 56, 65, 68, 95 and 101 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following reasons apply:

- a) Claims 56, 95 and 101 are vague and indefinite in that the compounds of formula III contain an oxygen atom with a negative charge, however, it is not seen where the balancing positive ion is.
- b) Claims 56, 95 and 101 are vague and indefinite in that the purinyl moiety of Formula VI may contain a substituent at the 2 position which is a double bonded oxygen atom, i.e. =O, however, position 2 already possesses three bonds. It is not known how the carbon atom at the 2 position can have 5 bonds.
- c) Claims 56, 95 and 101 are vague and indefinite in that the purinyl moiety of Formula VI may contain a substituent at the 4 position which is a double bonded oxygen atom, i.e. =O or an amino group, i.e.  $\text{NH}_2$ , however, position 4 already possesses four bonds. It is not known how the carbon atom at the 4 position can have 5 bonds when  $\text{NH}_2$  is present at position 4 or 6 bonds when double bonded oxygen is present.
- d) Claims 56, 95 and 101 are vague and indefinite in that the pyrimidinyl moiety of Formula VII contains a N atom in the ring which only possess two bonds. It is not known what is attached to the N atom at the 3 position of Formula VII.

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- e) Claim 65 recites the limitation "NCO" in the definition of X. There is insufficient antecedent basis for this limitation in the claim.
- f) Claim 68 recites the limitation "cytosine, guanine, xanthine and hypoxanthine" in the definition of B. There is insufficient antecedent basis for this limitation in the claim.

*Claim Objections*

7. Claims 58-60 and 62-64 are objected to because of the following informalities:

- a) Claim 58 does not indicate what is meant by  $C_8$  for  $R_1$ .
- b) Claim 59 does not indicate what is meant by  $C_{10}$  for  $R_1$ .
- c) Claim 60 does not indicate what is meant by  $C_{12}$  for  $R_1$ .
- d) Claim 62 does not indicate what is meant by  $C_8$  for  $R_2$ .
- e) Claim 63 does not indicate what is meant by  $C_{10}$  for  $R_2$ .
- f) Claim 64 does not indicate what is meant by  $C_{12}$  for  $R_2$ .

Appropriate correction is required.

8. Claims 57-64, 66, 67, 69-71 and 96 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2<sup>nd</sup> paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The closest prior art U.S. Patent No. 4,471,113 shows compounds with a similar core to the compounds of the instant invention.

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However, none of the prior art of record nor a search in the pertinent art area teaches the phosphonate compounds of Formula III as claimed herein.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Coleman whose telephone number is (703) 305-1880. The examiner can normally be reached on Monday thru Friday from 9:00 AM to 5:30 PM.

The fax phone number for this Group is (703) 308-4734 for "unofficial" purposes and the actual number for **OFFICIAL** business is **308-4556**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

*Brenda Coleman*  
Brenda Coleman  
April 19, 2000